IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANT: PENN, Laurence Richard

SERIAL NO.: 10/733,163

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TITLE: METERING DEVICE

ART UNIT: 3745

EXAMINER: Lazo, T.E.

AMENDMENT "A"

Director of the U.S. Patent and Trademark Office P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

In response to the Office Action of March 7, 2005, a response being due with a one-month extension of time by July 7, 2005, please consider the following remarks:

REMARKS

Upon entry of the present amendments, previous Claims 1 - 23 have been canceled and new Claims 24 - 36 substituted therefor. Reconsideration of the rejections, in light of the forgoing amendments and present remarks, is respectfully requested. The present amendments have been entered for the purpose of distinguishing the present invention from the prior art and also for the purpose of placing the claim language into a more proper U.S. format.

In the Office Action, it was indicated that Claims 1, 2, 19 - 21 and 23 were rejected under 35 U.S.C. §102(b) as anticipated by the Demers patent. Claim 3 was rejected as being obvious over the Demers patent in view of the Powers patent. Claim 4 was rejected as being obvious over the

Demers patent and the Powers patent. The Examiner also had certain formality objections with respect to the language of Claim 1 and 19 - 23. The disclosure was objected to for a minor typographical informality in paragraph [0015]. Importantly, the Examiner has indicated that Claims 5 - 18 were "objected to" as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base Claim and any intervening claims.

As an overview to the present reply, Applicant has extensively amended the original claim language in the form of new independent Claims 24 - 36. New Claims 24 - 36 express the original limitations in a more U.S. format, including proper antecedent bases and proper structural interrelationships throughout. Any indefinite terminology found in the original claim language has been corrected herein. In particular, new independent Claim 24 corresponds to the limitations found in original Claims 1 and 2. Dependent Claims 25 - 31 correspond, respectively, to the limitations found in original dependent Claims 3 - 9. Dependent Claims 32 - 36 correspond, respectively, to the limitations found in original dependent Claims 13 - 17. Previous dependent Claims 10 - 12 have been canceled as being directed to a "method". Original dependent Claims 19 - 23 have been canceled in view of the Examiner's formality objections.

New independent Claim 24 corresponds to the limitations that have been approved by the British Patent Office in connection with a corresponding application filed in Great Britain. This independent claim incorporates the limitations of original independent Claim 1, along with the limitations of dependent Claim 2. As such, independent Claim 24 is restricted to a situation in which the motor arrangement is controlled by a control unit in response to a signal generated in response to the shuttle the first position or the second position.

With the prior art Demers patent, Applicant respectfully contends that independent Claim 24 is patentably distinguishable from this prior art reference. The Demers patent shows a rotary four-way valve 4. Importantly, in column 2, lines 60 - 64, of the Demers patent, it is stated that:

The valve stem 25a of four-way rotary valve 4 is rotated by its shaft 26 on which is secured a sprocket 27 driven in rotation by a chain 28 trained on the sprocket 27 and also on a sprocket 29 secured to the output shaft 30 of the speed reducer 6, driven by motor 5.

As such, it is clearly shown that the four-way rotary valve is "rotated" by shaft 26. The valve body is identified as a block of square cross-section with four bores disposed at the same level and at right angles to each other. As was stated in column, lines 10 - 13:

Rotation of the valve stem through one-quarter turn clockwise from the position of FIG. 3 will make communication between bores 31 and 32 on the one hand, and 33 and 34 on the other hand. Groove 36 makes communication between bores 32 and 33.

As such, the turn of the valve stem allows communication between selected bores. This is quite different than the concept of the present invention, as defined by independent Claim 24, where a "spool valve" is defined. As defined in independent Claim 24, the "spool valve" moves axially within its own chamber in order to effect control of the shuttle.

Applicant notes that the Powers patent is not pertinent to the present application. The material that is dispensed in the piston is illustrated toward the top of Figure 1. The piston moves toward the left to draw product into a chamber and moves toward the right to eject material from the chamber. There is a control valve 16. However, the precise technical structure of the control valve 16 is not clearly illustrated. At a lower position, there is an element which appears to be a "shuttle" in the nature of the present invention. However, this is not a shuttle in the definition of the present

invention in that the illustrated arrangement does not dispense any material, but instead simply constitutes a hydraulic control arrangement. On this basis, Applicant contends that the combination of the Demers and Powers patent would not teach the present invention, as defined by independent Claim 24.

Applicant has revised the specification so as to correct the informality that is identified in paragraph [0015].

Based upon the foregoing analysis, Applicant contends that independent Claim 24 is now in proper condition for allowance. Additionally, those claims which are dependent upon Claim 24 should also be in condition for allowance. Reconsideration of the rejections and allowance of the claims at an early date is earnestly solicited. Since no new claims have been added above those originally paid for, no additional fee is required.

Respectfully submitted,

6-29.05

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